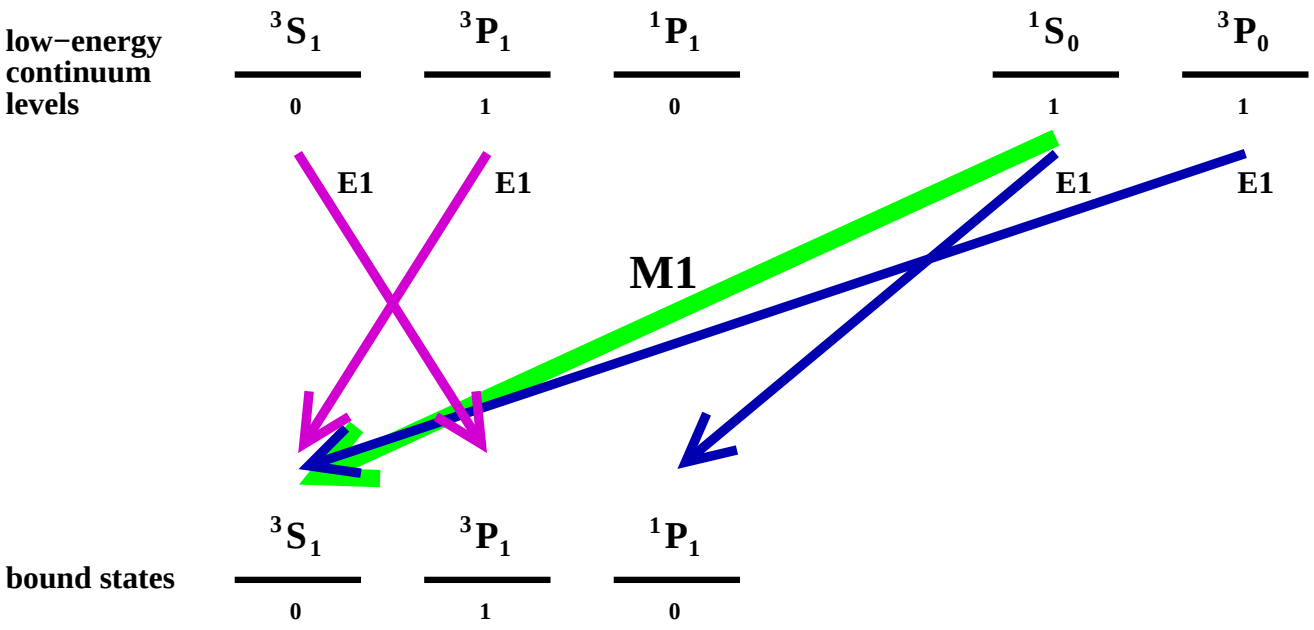
n − p system: $\frac{^{2S+1}L_J}{\text{isospin}}$



Capture is M1: $^1S_0$ to spin-1 deuteron $^3S_1$ (ignoring D-state contributions).

Parity violation arises from mixing of P states and interference of the E1 transitions.

A_γ cannot come from J=0 capture states, so it must come from $^3S_1$ - $^3P_1$ mixing.

Therefore A_γ results from $\Delta I = 1$ terms in the weak Hamiltonian.